

## Distribution enclosure Series KU

The right enclosure solution for  
every need

**DOLD**   
Our experience. Your safety.

# Individually packed

## 55 or 70 mm installation depth

The two enclosure families KU 4100 and KU 4500 offer all advantages of the KU 4000 series. They correspond to DIN 43880 and cover all common mounting widths from 17.5 to 210 mm. The enclosures of the KU 4100 series have a mounting depth of 70 mm and thus offer much space for the electronics. With a mounting depth of only 55 mm, the enclosures of the KU 4500 series find still sufficient space also in the flattest distributors. With the new modern design and their many options, this enclosure series is suitable also for all future-oriented applications in the building automation system.



### Enclosure escapes

Individual openings, e.g. for BUS-connections or adjustment elements, are possible at all levels of the enclosure.



### Ventilation slots

Optional sidewise ventilation slots permit optimal heat dissipation. Thereby the positioning of the slots can be selected as desired.



### Modularity

Mounting widths from 17.5 to 210 mm permit fine adjustment of the size. Also service and indication elements can be integrated as desired.



### Connection technology

The free categorisation of the contact terminals and raster dimensions ensures the independence of the terminal selection. The circuit board connection takes place through machine-solderable connection blocks. Optionally, they can be fixedly integrated or pluggable. Spring-loaded terminals for quick connection of the devices are also available.





#### Individual enclosure solutions

The client-specific tool applications make possible individual enclosure solutions, e.g. mounting frames for displays, safety mats, light guides, etc.



#### Variable mounting of circuit boards

Freely selectable circuit board positions in three spatial directions permit an optimal use of the space in the enclosure. Circuit board guiding grooves facilitate thereby the assembly.



### Many options:

#### ▶ Modular enclosure concept

The modular enclosure concept allows client-specific designs both in functional and optical aspect.

#### ▶ Flexibility

The well-conceived and variable concept of the tool guarantees the maximum flexibility of this enclosure series.

#### ▶ Comprehensive possibilities / features

With its comprehensive accessories packet, foldable fronts, transparent lids, light guides with different lengths, coding possibilities, variable tool concept, versatile terminal options and blind plugs, the enclosure series leaves hardly anything to be desired.

#### ▶ Individual printing

All common printing techniques are possible, such as pad printing, digital printing and laser printing.



#### **Economic interconnectedness**

The optional In-Rail bus replaces the costly individual wiring with an interruption-free and flexible system solution. It permits a simple integration in building automation system. Optionally, the KNX or Double-KNX can be integrated.

# IN-RAIL-BUS

## Flexible. Simple. Secure.

The user-friendly and extremely flexible BUS system is the most elegant solution for secure and fast transmission of signals, data and energy. In modular applications, it replaces the costly individual wirings in the connection, distribution and servicing. This mounting rail bus reduces the wiring costs and the error rate. In this way, it provides more economic efficiency, higher flexibility and permits to make subsequently system adjustments as easily as child's play.

The IN-RAIL-BUS system is based on a carrier profile. It can be easily integrated in the 35 mm standard mounting rails and includes the individually customisable BUS circuit board. With its high flexibility, this concept permits many client-specific solutions.



### User- and service-friendly

Quick and easy module installation also in the existing module group - without any effect on the neighbouring modules. This minimises the time and cost also in the case of module replacement.



### Freely positionable

Free positioning of the device modules on all 35 mm standard mounting rails. An optional coding permits positioning specifications. Covers are available for the unused areas.



### Connecting instead of wiring

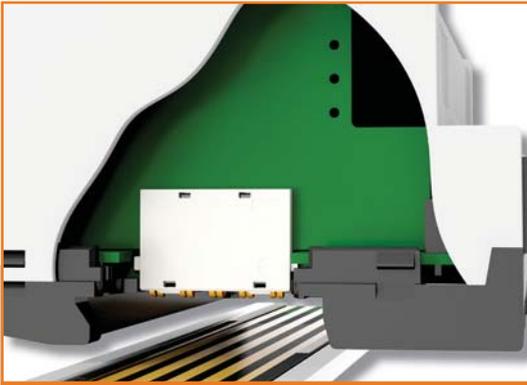
Instead of the costly wiring, the module connection takes place by a simple snapping onto the top-hat rail. Hereby, at the same time, a secure connection with the mounting rail bus is ensured.



### High scalability

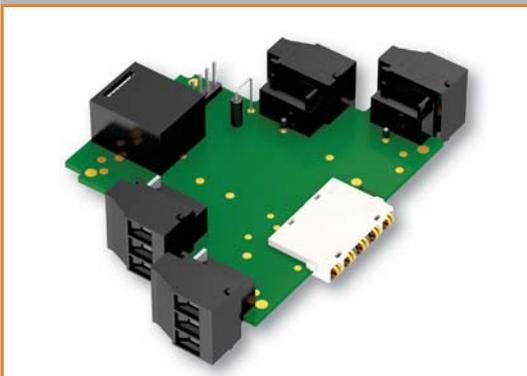
Consistent connection solution for all enclosure types and enclosure widths from the 17.5 mm small compact solution to the large-space enclosure with width almost as desired.





#### High contact safety

The machine-solderable contact spring block with gold-plated double contacts offers highest reliability of the contact to the mounting rail bus. In this way, it prevents the undesirable bus interruptions and thus ensure maximum availability of the device.



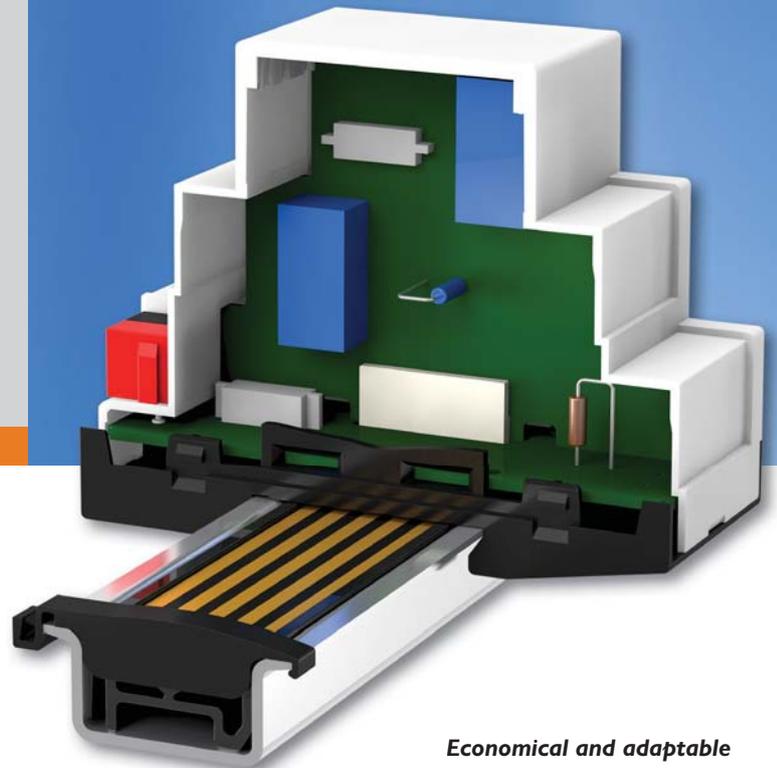
#### Cost-effective manufacturing

Every BUS contact block is soldered together with the device electronics in a single manufacturing step in the circuit board of the device. The manual reworking is dropped.

### Advantages of the IN-RAIL-BUS:

- ▶ Secure and fast transmission of signals, data and energy
- ▶ Replaces the costly individual wiring
- ▶ Quick and cost-effective module replacement
- ▶ Protection against accidental touch contact by customisable mounting rail cover and protective end caps
- ▶ Makes possible many client-specific solutions
- ▶ Also for device-internal BUS- connection of several functional modules
- ▶ UL admission

And what can we do for you?



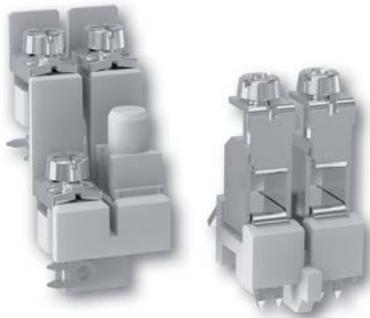
#### Economical and adaptable

The In-Rail-Bus replaces the costly individual wiring with an interruption-free and flexible system solution. This is securely integrated in the 35 mm standard top-hat rail. The customisable mounting rail profiles permit the use of 7.5 and 15 mm high standard profiles.



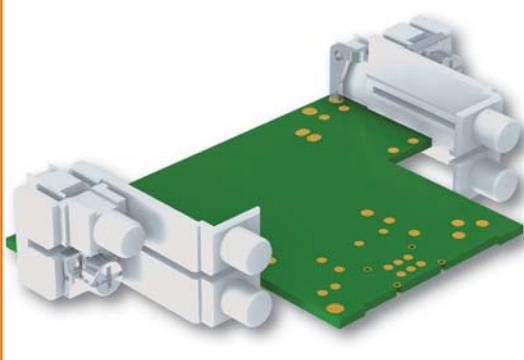
# Universal, 55 mm mounting depth

This enclosure series fulfils all the requirements for the modern building automation system. With its variant diversity, also individual task assignments can be solved without problems. Also the enclosure size can be adapted gradually to the application. So the enclosure series covers all common mounting widths from 8.8 to 140 mm. For connecting the devices, along with the conventional, undetachable screw-type terminals, also cage tension-spring clamps for particularly economical installation of the devices are available. Also stronger currents can flow and high-voltage current pins of up to 50 A can be used. It goes without saying that for connecting and communication with other devices and systems also various connections can be realised such as, for example, BUS connections, KNX (EIB), RJ-45, etc. The enclosures are designed both for top-hat rail and screw attachment.



## Connection technology

Conventional, undetachable screw-type terminals, cage tension-spring clamps, high-voltage current pins as well as BUS connections are possible. Two conducting lines can be connected per connection terminal. The unnecessary connection terminals can be closed with blind plugs or injection-moulded surfaces in the hood.



## Machine-solderable

The machine-solderable connection blocks permit to perform economic soldering with other components on the circuit boards. Also additional wire connection is possible.



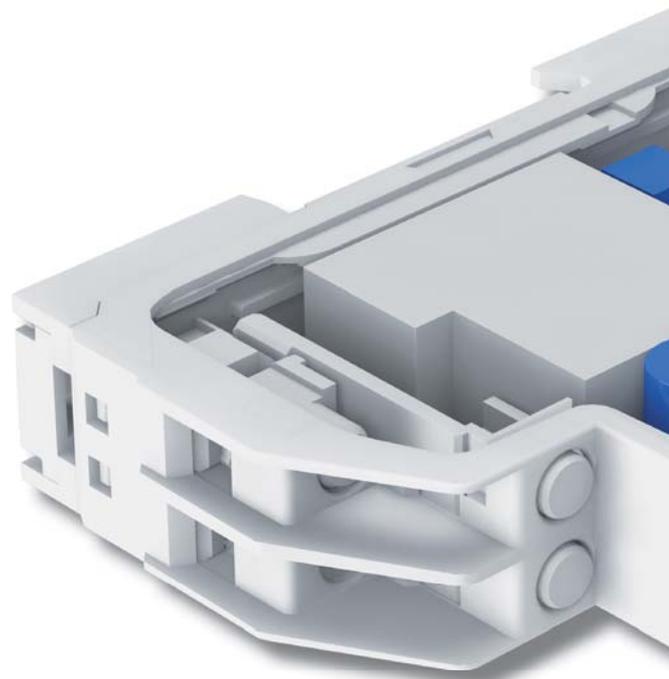
## Modularity

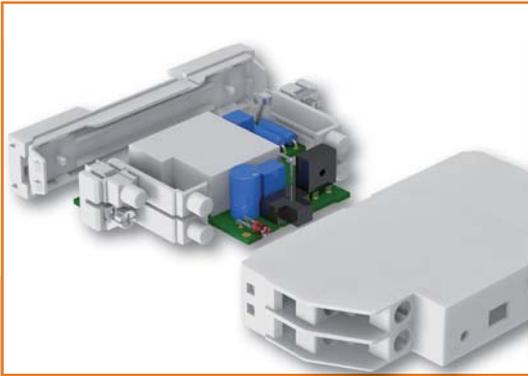
Mounting widths from 8.8 to 140 mm permit fine adjustment of the size.



## Two mounting depths

The distribution enclosures of the KU 4000 series have mounting depth of 55 mm. Enclosures with mounting depth of 92 mm are available also for control cabinets.





#### Printed circuit boards installation

The possibilities for receiving vertical and horizontal circuit boards as well as their combination increase the flexibility in the construction of the devices.



#### Module rack

The 70 and 140 mm wide enclosures can be equipped with one or with two pluggable module racks with transparent swing-front.

### Many options:

#### ▶ Individual enclosure openings

For optimal adaptation to the special requirements, the enclosures can be equipped with individual openings, e.g. for ventilation slots for better heat dissipation or for bus connections.

#### ▶ Replaceable front

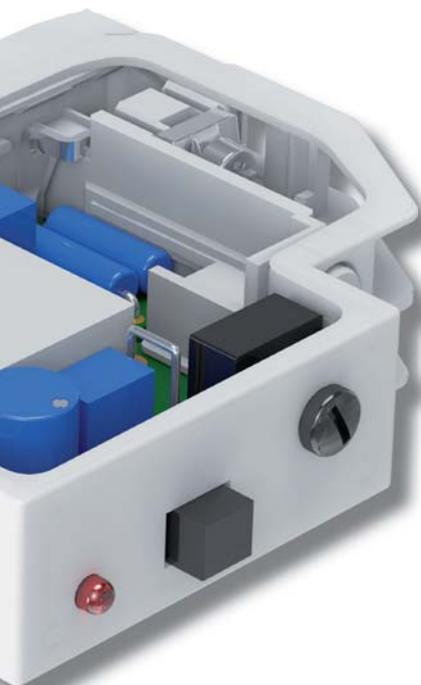
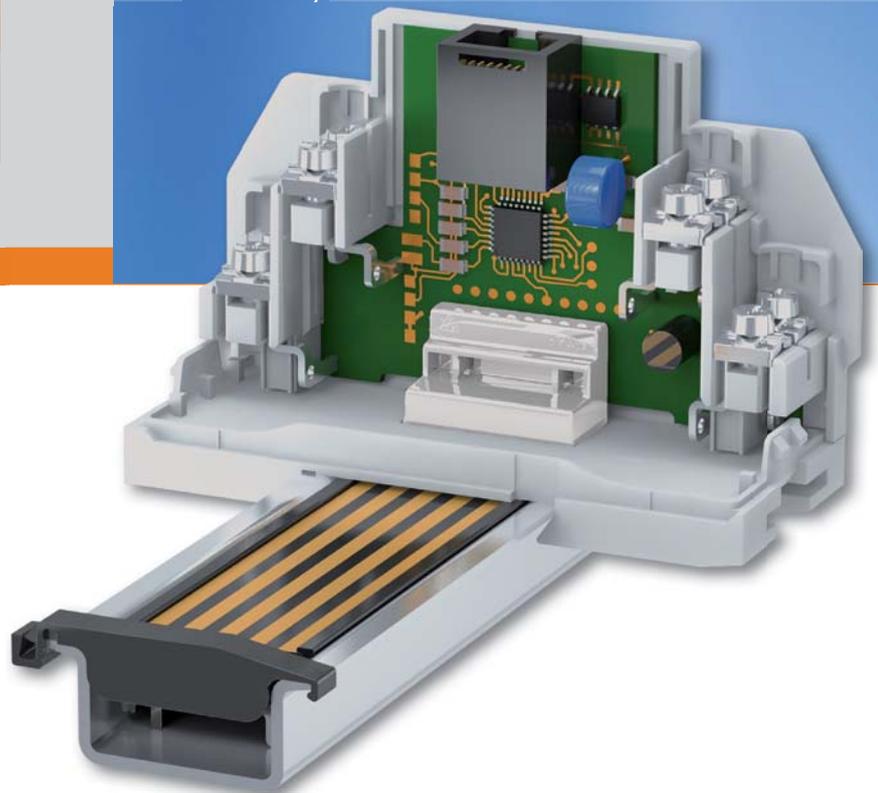
It protects the adjustment control elements and the indicator elements and can be delivered transparent or in the colour of the enclosure.

#### ▶ Pluggable module rack

Optional module racks serve for receiving circuit boards and permit the replacement of complete functional units. In this way, the enclosures are suitable particularly for the mounting of field-bus enabled devices. With the replacement of the module racks, the devices can be easily adapted to a field-bus system.

#### ▶ Grounding spring

An optional integrated grounding spring under the enclosure bottom offers a good possibility for improving the EMV characteristics. With the snapping of the enclosure on the DIN rail, the electric connection of the printed circuit board and the DIN rail takes place automatically.



# DOLD - solutions for your electronics. Just as individual as your application.

## It all depends on the right enclosure!

Electronic enclosures not only serve to package your electronics, they also offer much more. Modern tool concepts make off-the-shelf solutions a thing of the past. Due to high flexibility in design, colour and function, our enclosure systems can be easily adapted to your requirements and application.

We see ourselves as project partners and support you with the design-in process. You can fully concentrate your valuable resources on electronics development. You can rely on our competence based on decades of experience.

We would be pleased to inform you about further product solutions from our company.



### Switch cabinet enclosures

With various modular enclosure series in common widths, assembly-friendly electronic modules are created from assembled printed circuit boards. This means that the right enclosure solution is always available for future-oriented automation devices. Benefit from enclosure systems with graduated sizes, variable connection technology and optional DIN rail bus system.



### Distribution enclosures

The distribution enclosures meet all requirements in the field of modern building automation. They cover all common construction widths and installation depths and offer plenty of space for your electronics. With a large variety of variants, your individual tasks can be easily solved.



### Safety relays

As the competence leader for safety relays with forcibly guided contacts, PCB and miniature relays, we offer technically and high-quality solutions for the safe switching of electrical currents with minimum dimensions.



**DOLD** 

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